

### **Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application.

### **Listing of Claims:**

1. (Original) A method of radiation processing of a product package of essentially equal rectangular size in a device having a radiation source, a collimator having a variable aperture, and a turntable, said radiation processing resulting in a point in the product package where the dose is minimal ( $D_{\min}$  point) and a point in said product package where the dose is maximal ( $D_{\max}$  point) comprising the steps of:
  - determining a first value of the collimator aperture, by increasing said aperture from a small value, where the  $D_{\max}$  point is located near the centre of the product package, up to a value where the  $D_{\max}$  point moves near to the centre of a small side of said package's rectangular horizontal cross-section;
  - determining a second value of the collimator aperture, by further increasing the collimator aperture up to a point where the  $D_{\min}$  point moves from a point near the corner of the product package to the centre of said package;
  - processing said package with radiation, the collimator aperture being kept at a constant value comprised between said first and said second value, the turntable being rotated at a variable speed.
2. (Original) The method according to claim 1, characterized in that the collimator aperture is selected as being said second value.
3. (Original) Apparatus for radiation processing of packages comprising a radiation source, a collimator having a variable aperture, and a turntable, characterized in that said collimator is adapted for adjusting its aperture prior to irradiation of a package.
4. (Original) The apparatus according to claim 3, characterized in that the ratio of collimator aperture over the distance  $d_1$  from radiation source to front face of collimator is adjustable between 0.54 and 0.73.

5. (Original) The apparatus according to claim 3, characterized in that the ratio of collimator aperture over the distance d2 from radiation source to centre of turntable is adjustable between 0.11 and 0.16.

6. (Currently Amended) Use of a method according to ~~any one of claims 1 to 2~~ claim 1 or of an apparatus ~~according to any one of claims 3 to 5~~ for radiation processing of packages comprising a radiation source, a collimator having a variable aperture, and a turntable, characterized in that said collimator is adapted for adjusting its aperture prior to irradiation of a package for irradiating product packages having a mean density comprised between 0.4 and 0.8 g/cm<sup>3</sup>.